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<110> XENOVA RESEARCH LIMITED
Boursnell, Michael E.G.
Inglis, Stephen C.

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ABSTRACT

VIRAL PREPARATIONS, VECTORS, IMMUNOGENS, AND VACCINES

A genetically disabled mutant virus has a genome which is defective in respect of a selected gene that is essential for the reproduction of infectious new virus particles, and which carries heterologous genetic material encoding an immunomodulatory protein such as GM-CSF, IL-2, or others, such that the mutant virus can infect normal host cells and cause expression of immunodulatory protein, but the mutant virus cannot cause production of infectious new virus particles except when the virus infects recombinant complementing host cells expressing a gene that provides the function of the essential viral gene; the site of insertion of the heterologous genetic material encoding the immunomodulatory protein preferably being at the site of the defect in the selected essential viral gene. Uses include prophylactic and therapeutic use in generating an immune response in a subject treated therewith; use in the preparation of a immunogen such as a vaccine for use in tumour therapy; use in the in-vitro expansion of (e.g. virus-specific) cytotoxic T cells; and therapeutic or prophylactic use in corrective gene therapy.